INFORMATION

Anxious Times in Tuberculosis*

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THERE IS A DANGEROUS TREND prevailing now in the profession at large, to belittle the magnitude of the tuberculosis problem. Indeed, even among physicians engaged in treating tuberculosis there is a deplorable lack of appreciation of the complexity of existing problems.

Present trends in tuberculosis indicate a phase so full of potentiality for good or evil that the question "whither tuberculosis" is no longer one of concern only to statisticians. Clinicians in daily touch with the problem cannot help speculating on current trends and their effects upon treatment of tuberculous patients. Study of current statistics arouses serious reflection regarding their significance and portent for the future. The full picture includes features with ominous potentialities. There are, indeed, some facts which indicate the possibly approaching critical recrudescence of morbidity with increased spread of the disease.

The persistently divergent trend in mortality and morbidity is one that should give us much concern. Recent statistical reports have derived therefrom a serious warning. The figures themselves are perhaps easier to explain by clinical trends than epidemiologic theories. Facts speak for themselves. Mortality from tuberculosis has by now reached the unprecedented low of 16 per 100,000. The downward trend in mortality from tuberculosis has recently become accelerated, and there is every reason to believe that this acceleration will continue. We may confidently expect that soon tuberculosis will cease to be a major cause of death.

This highly optimistic outlook in mortality stands in very sharp contrast with the pessimistic picture of morbidity. Recent statistics indicate that tuberculosis morbidity has tended to remain on a high level. It was recently pointed out by Drolet that morbidity figures for 1950 were higher than those for 1940 by more than 20 per cent.[1] The full implications of this trend were recently considered on the basis of latest morbidity figures, by Mary Dempsey, statistician of the National Tuberculosis Association.[2] In presenting the picture of "tuberculosis today" she paints a grim warning which we quote here in full: "The curious assumption on the part of some people that tuberculosis is no longer a major problem in the United States is not only at variance with the facts but is downright dangerous. Recent estimates place the number of Americans with tuberculosis, both active and inactive, at 1,200,000, a figure large enough to shake the hardiest optimist out of complacency.

"Approximately 400,000 active cases of the disease exist in this country, according to estimates agreed upon by the National Tuberculosis Association and the Public Health Service. Information on file in case registers indicates that of these 40,000 are sputum-positive patients living at home. An additional 75,000, also unhospitalized and with active disease, have not been medically examined during the past year. Add to the total of these two groups an estimated 150,000 unreported active cases, and we get an approximate 240,000 unhospitalized tuberculous Americans, most of whom are in a position to spread the disease. It becomes obvious, therefore, that tuberculosis is very much in the 'major problem' category."

It is natural for the clinician to associate the divergent trend of mortality and morbidity and persistent high morbidity levels with recent trends in the treatment and management of tuberculous patients. Consideration of trends in tuberculosis not only leads to a logical explanation of these trends but also foreshadows the ominous potentiality of an approaching critical phase.

Nothing is more obvious to the clinician than the fact that the recent acceleration in the decline of mortality can be attributed greatly to modern chemotherapy. Streptomycin has beyond question greatly reduced the incidence of fatal tuberculosis. The life-saving effect of streptomycin has not been conclusively demonstrated in fatal hematogenous and miliary tuberculosis. On the other hand, however, since the great bulk of tuberculosis is pulmonary, here its effect at least for the time being is evident in the large numbers of lives saved. What the ultimate fate of these patients will be remains to be seen, and in their outcome may lie the answer to the question of persistently high morbidity.

It seems a paradox to speak of the potential dangers of recrudescence of disease in the present phase of tuberculosis, when we already have at our disposal a choice of several effective agents for its control. Yet this situation is the natural outgrowth of recent developments and rises from a human tendency toward overconfidence in our achievements

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and from relaxation of zeal and vigilance. The danger of a critical phase in tuberculosis is inherent in the following developments:

1. Overconfidence in the complete effectiveness of available chemotherapeutic agents has led to dangerous trends in the treatment of patients, in that

(a) more of them are now allowed to cure at home, and

(b) more of them are now treated with drugs in ambulatory fashion, while remaining under care of family physicians, without expert guidance of specialists. These trends make for wider contacts with potential spreaders of the disease.

2. Chemotherapy has resulted in an increased number of patients whose tuberculosis is of arrested, latent but potentially active, or reactivated status. This makes for an increased number of potential spreaders.

Overconfidence in the effectiveness of available drugs tends to blind us to the following facts: (1) By themselves these drugs singly or in combination will not bring about cure in the majority of patients. In a large proportion they result merely in suppression of activity or in temporary arrest or incomplete resolution with residues of potential activity. (2) Our criteria for recognizing latent activity are very inadequate. (3) Patients with lesions of latent activity tend to resist treatment.

It is remarkable how these developments tend to restore the very circumstances which have so long militated against our efforts to control tuberculosis, namely, our inability to bring under control cases of tuberculosis in their latent (incipient) phase. Before modern casefinding by x-ray surveys, the vast majority of new cases were not discovered before the disease had reached a far-advanced stage. Even now too many of the new cases are not discovered in the early phase. Incipient tuberculosis is latent tuberculosis, the activity of which is difficult to determine unless we have serial x-rays.

Today there are many patients whose lesions are latent because of recent chemotherapy. Only long-range observation will reveal whether or not they are healed. Resection of the potentially most dangerous lesions is now being performed in a number of these, and in a considerable proportion recrudescence of disease is a likelihood sooner or later.

Patients with latent tuberculosis have always evinced great resistance even to temporary separation from their work and families. Physicians treating these patients have always had to cope with this resistance. Overconfidence in drug therapy tends to augment this resistance of patients with an increased tendency on the part of physicians to yield. More patients with latent but potentially active disease accordingly will escape that close control in institutions under continuous expert surveillance which in recent years has been acknowledged an essential and important factor in tuberculosis control.

What about the recent epidemiologic shift of pulmonary tuberculosis to higher age groups? The majority of tuberculous patients, particularly males, are now found in the fourth and fifth decades. That which has been said above regarding clinical latency of the disease and resistance to institutional treatment applies particularly to these patients. Furthermore, an ever larger proportion of patients suffering from progressive pulmonary tuberculosis is in advanced age groups in which symptoms of their pulmonary disease tend to blend with symptoms of other diseases of advanced age. This further favors delayed recognition and limits energetic treatment of their tuberculosis.

All of the factors discussed above working together tend to bring about a weakening of tuberculosis control by a trend of events, one leading to the other through force of circumstances.

Last but not least the danger of streptomycin-resistant bacilli should be considered. There is a growing belief that long continued chemotherapy (with combined streptomycin and PAS) results in permanent loss of viability of the bacilli located in the lesions. This belief may ultimately prove to be wrong. If so we may face many recrudescences of tuberculosis by a flareup of (arrested) latent lesions with streptomycin-resistant bacilli. Even more ominous is the threat of an increasing number of new cases infected with streptomycin-resistant bacilli from the above described sources. Some workers now express faith in averting all this with BCG vaccination. This, too, appears to be dangerous overconfidence. An analysis by Drolet of recent reports from countries using BCG extensively since its introduction indicates no effect upon the trend of ratio of new cases.

Should the chain of events above discussed really lead to a recrudescence of tuberculosis, the consequences will then depend largely on the existence or absence of a curative, effective, chemotherapeutic agent. That the "INH" drugs are not such agents is quite apparent by now. Should we fail to develop another more effective drug are we not headed for a critical phase in tuberculosis?

REFERENCES

1. Drolet, G. J., and Lowell, A. M.: Dis. of Chest, 21:527, May 1952.

2. Dempsey, M.: Bull. Nat. Tuberc. Assn., 38:86, June 1952.

New Laws Affecting Medical Partnerships, Clinics and Auxiliary "Hospitals"

THE 1953 LEGISLATURE enacted three new laws that directly affect medical partnerships, clinics and industrial or emergency "hospitals."

The first measure, A.B. 459, amended the hospital licensing law by adding a new section prohibiting the use of the word "hospital" by any person unless the facility so designated is licensed by the State Department of Public Health, or unless the facility is one of the specially designated exempt institutions (federal and state hospitals, institutions relying entirely on prayer, mental institutions licensed by the Department of Mental Hygiene, infant shelters and homes for the aged licensed by the Department of Social Welfare, and county hospitals). Under this new law, it will be illegal to use the term "industrial hospital" or "emergency hospital" or the word "hospital" alone or in conjunction with any other words unless the facility is first duly licensed by the State Department of Public Health. Under the hospital licensing law the Department of Public Health does not issue a license until, after inspection, it is satisfied that the institution qualifies as a hospital and meets all the standards set forth in the hospital licensing law and department regulations.

The second measure is S.B. 1770, which completely revises the present clinic licensing law. S.B. 1770 does not become effective until January 1, 1954. Thereafter, however, clinics will be governed by the new clinic licensing law. The new law discontinues licensure for private pay clinics, except those already in existence. It defines charitable clinics, limiting licensed charitable clinics to bona fide charitable corporations; it continues the teaching and research classification; it provides for employers' clinics and employees' clinics, both of which must be operated on a nonprofit basis; outpatient departments of hospitals are exempt, inasmuch as the hospitals themselves must be licensed under the hospital licensing law; and the powers of the state to investigate applicants for a clinic license and to administer the law are clarified, with a specific outline of minimum standards. Violations of the clinic licensing law may be enjoined by court order, on application of the department. Most important of these changes in the clinic licensing law is the elimination after January 1, 1954, of the private pay clinic classification. For the future the use of the term "clinic" by newly organized groups or institutions will be limited to those clinics that are operated as charities or for teaching and research, or by an employer or a group of employees (limited to health services of such employees).

The third measure is S.B. 1349, which modifies the present sections of the Business and Professions Code (Bus. & Pro. Code Secs. 2393 and 2429) that forbid the use of any fictitious name by a physician in connection with his practice. The new law, which will be effective September 30, 1953, continues to prohibit practice under a fictitious name, but expressly permits the formation of medical partnerships, provided that if any such partnership or group does not use the names of all the partners in the conduct of its practice, then it must use at least the surname of one of the partners, plus the words "medical group." For example, if Doctors Black, White, Green, Brown and Gray form a group or partnership, they may designate themselves simply as "Doctors Black, White, Green, Brown and Gray." However, if they desire to use a shorter identification, they may call themselves the "Gray-Black Medical Group" or "Gray Medical Group," etc. As in the past, however, the practice of medicine and surgery under any fictitious or assumed name that does not identify one or more of the physician partners will constitute a violation of the Medical Practice Act.

The cumulative effect of the three new laws can be illustrated as follows: Dr. Brown may not identify his medical office as the "Emergency Hospital" or "Industrial Hospital" unless he qualifies for and obtains a hospital license from the State Department of Public Health. Dr. Brown may not identify his office as the "Silent Hills Clinic," nor may he obtain a license to operate a private pay clinic. Dr. Brown may, however, if he associates other physicians in partnership or association with him, identify the office in which he and his associates practice as the "Brown Medical Group," or *all* names of all physicians in the group may be used without embellishment.

The Chorionepithelioma Registry

Of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons

IT HAS BEEN about five years since the inauguration by the American Association of Obstetricians, Gynecologists and Abdominal Surgeons of the Albert Mathieu Chorionepithelioma Registry. The project was made possible by an initial monetary gift from the late Dr. Albert W. Holman, of Portland, as a memorial to his former colleague, the late Dr. Albert Mathieu, also of Portland. Later the financial support of the Registry came from the Association itself, and during 1952 from the American Cancer Society.

Beginning with January 1, 1953, the continuance of the Registry has been made possible by a gener-

ous annual grant made to the Association for this purpose by one of the strongest and most progressive specialty organizations of this country, the Obstetrical and Gynecological Assembly of Southern California, as a part of its various activities for the advancement of our knowledge of obstetrics and gynecology.

In 1947 an announcement of the formation of the Registry was made more or less simultaneously in the *American Journal of Obstetrics and Gynecology*, the *Western Journal of Surgery, Obstetrics and Gynecology*, the *Journal of the American Medical Association*, the *Archives of Pathology*, and the *American Journal of Pathology*. The purpose of the Registry, as stated in the original announcement, was the collection, authentication and study of chorionepitheliomas and such cognate material as hyatidiform moles. The frequent difficulties in diagnosis in this field, and the incompleteness and confusion in our knowledge concerning such lesions, were the primary incentives for founding the Registry. It has already become perhaps the richest storehouse of such material in the world, and at this writing the registered chorionepitheliomas alone number some 70 cases. As material accumulates and matures for follow-up purposes, publications based on the Registry material will be put out by the Registry Committee, which consists of Dr. Emil Novak, chairman, Baltimore, Md.; Dr. Willard C. Cooke, Galveston, Texas; Dr. Robert A. Ross, Chapel Hill, N. C.; and Dr. Herbert F. Schmitz, Chicago, Ill. The first of these publications will appear in the near future.

While many gynecologists, obstetricians and pathologists have already cooperated in this important work, it has seemed wise to bring the Registry again to the attention of the profession, and to seek for even wider and more general cooperation. Clinical data, together with representative slides or gross tissue, may be sent to the chairman, Dr. Emil Novak, at 26 East Preston Street, Baltimore 2, Md. Regular printed forms for systematizing clinical histories are obtainable from the chairman of the committee. While the Registry makes no pretense of conducting a rapid diagnostic service, prompt acknowledgment of the material will be accompanied by the purely personal diagnostic impression of the chairman, with the explanation that the material will be circulated among all members of the committee for more deliberate collective study before final classification.

Both the sponsoring organization, the American Association, and the Southern California Assembly, which has so generously committed itself to the support of the Registry, invite the cooperation of the profession in this potentially rich investigative project.

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